jobs, followed by the nonmetropolitan counties with about 9,900 and 6,900 by Pima County. Maricopa County should still contribute the largest number of jobs, but the nonmetropolitan counties should surpass the rate of growth of the two metropolitan counties in the next two years. The nonmetropolitan counties are projected to grow by 4.4 percent in 1988, compared to 2.9 percent in Maricopa County and 2.8 percent in Pima County.

The better outlook for the nonmetropolitan counties can be attributed to three factors:

1. The mining industry has incorporated new technologies to extract copper less expensively. As the price of copper rose again, the industry started to gradually increase its employment base.

2. Prices of agricultural commodities are rising.

3. Tourism and manufacturing are becoming the economic base of many nonmetropolitan counties.

Among the nonmetropolitan counties, those having manufacturing and tourism as their base will contribute the most toward higher state growth. Nevertheless, it is important to note that, since Maricopa County's employment base is about two-thirds of the state total, it will have greater influence in determining the outlook for Arizona's economy.

Overall, Arizona should continue to grow at a faster rate than the national average as it has done in the last four years. Unfortunately, the unemployment rate will also move to higher levels than now, and higher than national rates, but should not reach the levels observed in the recession year of 1982.

Jalal Ahmad

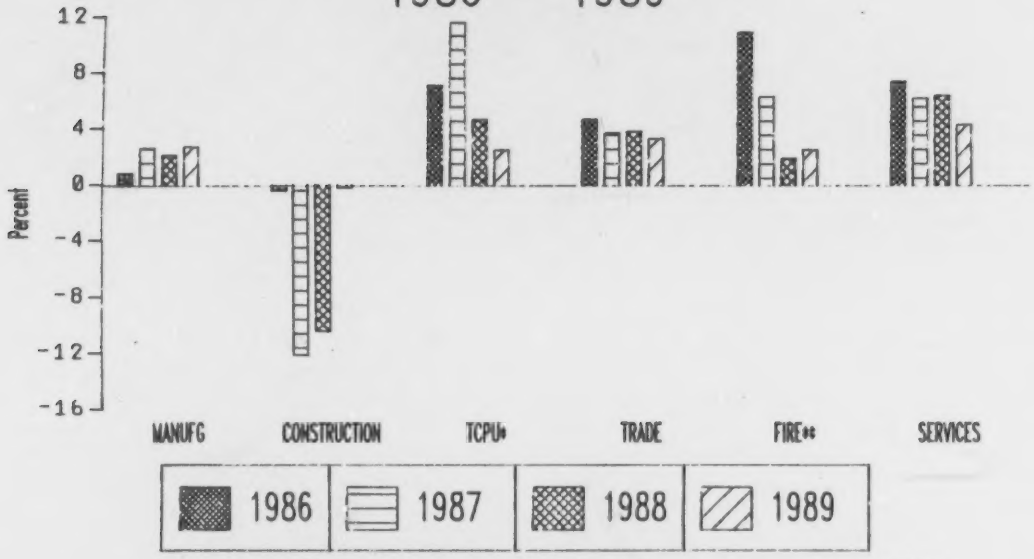
Maricopa County

The economy of the Phoenix metropolitan area reflected that of the state economy in 1987. Labor force and employment grew by 2.9 percent and 3.3 percent, respectively, in 1987. Relatively higher employment growth than labor force growth resulted in a decline in the annual average unemployment rate to 5.2 percent in 1987 from 5.6 percent in 1986. The slower labor force growth was principally due to the decline in total unemployment. As in the state, the decline in unemployment was due either to an increase in discouraged workers leaving the unemployment rolls or job seekers leaving the county for better opportunities elsewhere. It is forecast that the county will realize a modest growth in its labor force over the next two years. In 1988, the labor force is expected to grow by 3.2 percent, followed by 3.5 percent growth in 1989. Continued decline in construction employment and slower growth in manufacturing will also retard employment growth in the near future. Employment by place of residence is forecast to go up by 2.6 percent in 1988 and 3.3 percent in 1989. As employment growth falls short of labor force growth, the number of unemployed should rise, resulting in a higher unemployment rate of 5.7 percent in 1988.

The economic outlook for nonagricultural wage and salary employment continues to be modest. Total wage and salary employment should grow by a rate of 2.9 percent or 26,300 new jobs in 1988. Similar growth is expected in 1989, although 1989's growth will be slightly improved.

In 1987, construction employment fell by 12.1 percent. Of the total statewide decline of 10,700 construction jobs, the Phoenix area took the largest loss of 9,500 or 89 percent. The only explanation for this is that, during the recovery period, the Phoenix metropolitan area achieved the largest gains. The outlook for this industry continues to be weak. Reports show that there is still an overabundance of multifamily dwellings, office buildings, and retail spaces. Unless these additional facilities are absorbed through new demand, construction employment in these sectors

MARICOPA EMPLOYMENT GROWTH RATES IN SELECTED INDUSTRIES 1986 - 1989



* TCPU = TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES
** FIRE = FINANCE, INSURANCE, AND REAL ESTATE

should continue to slide. Lower mortgage interest rates may help create some additional demand for single-family housing, but that will be offset by lower personal income growth and weak consumer confidence. Taking all these factors into consideration, this industry should face another year of downturn. Employment is forecast to drop by 7,200 or 10.4 percent in 1988. By 1989, the industry demand and supply conditions will stabilize, resulting in a flat or slightly declining employment level.

A second important reason for the slow growth in wage and salary employment is the anemic growth in manufacturing. There are two important points to be made regarding this industry. First, nearly 90 percent of the firms employ 50 or fewer people. In other words, the industry is composed of a large number of small firms. Second, nearly 80 percent of its total jobs are in durable goods manufacturing, where there are producers of both defense-related products and semiconductor and computer-related products. Recently, producers of defense-related products have been cutting back employment as many of their projects are completed or are nearing completion. In addition, due to the budget cuts in the defense sector, producers will be forced to cut back more jobs in the near future. The losses in the defense sector, however, are expected to be smaller than the gains in semiconductor and computer industries. The growth will depend on the demand for our products nationally as well as in the world market. There are indications that the fall in the value of the dollar is making our products more desirable, but Phoenix producers have not yet responded by increasing employment. It is forecast that these producers will react more positively by adding additional employment as the value of the dollar falls further or remains at its low level. In sum, the industry should grow by a modest rate of 2.1 percent or 2,900 new jobs in 1988, followed by a higher growth of 2.7 percent or 3,700 new jobs in 1989.

The industries that will contribute the greatest number of new jobs are still the services and trade industries. Together, they will add about 23,500 new jobs out of a total 26,300 new jobs in the county.

MARICOPA COUNTY ECONOMIC FORECASTS
(Annual Averages, In Thousands)

	1987	Growth Rate	1988	Growth Rate	1989	Growth Rate
Labor Force	1,001.1	2.9%	1,032.6	3.2%	1,068.7	3.5%
Unemployed	52.1	-4.1	59.0	13.2	63.3	7.3
Unemployment Rate	5.2%	----	5.7%	----	5.9%	----
Total Employment	949.0	3.3	973.6	2.6	1,005.4	3.3
Total Wage and Salary Employment	912.7	3.4	939.0	2.9	967.7	3.1
Manufacturing	135.7	2.6	138.6	2.1	142.3	2.7
Mining	0.6	20.0	0.6	0.0	0.6	0.0
Construction	69.2	-12.1	62.0	-10.4	61.9	-0.2
TCPU*	49.0	11.6	51.3	4.7	52.6	2.5
Trade	230.9	3.7	239.7	3.8	247.7	3.3
FIRE**	74.8	6.3	76.2	1.9	78.1	2.5
Services	231.6	6.2	246.3	6.4	257.0	4.3
Government	120.9	4.0	124.3	2.8	127.5	2.6

* TCPU = Transportation, Communications, and Public Utilities.
** FIRE = Finance, Insurance, and Real Estate.

NOTE: Totals may not add due to rounding.

Growth in services will primarily come from hotels and motels, business services, and health services. Trade will add nearly 8,800 new jobs in 1988, followed by 8,000 in 1989. Within the trade industry, food stores will grow the most, followed by department stores and eating and drinking places.

The growth in finance, insurance, and real estate (FIRE) tapered off in 1987 after three consecutive years of explosive growth. Last year's slow growth of 6.3 percent was principally the result of weak real estate activities and the slowing down of the finance industry. Real estate activities were affected by the new tax law and the decline in construction. The finance industry slowed as most of the merging activities, resulting from deregulation, were completed in 1986 and early 1987. It is forecast that in 1988 both real estate and bank-merging activities will continue to slow, resulting in lower employment opportunities in the next two years.

Transportation, communications, and public utilities (TCPU) experienced a double-digit growth of 11.6 percent in 1987. Most of that growth occurred in the transportation sector. TCPU is forecast to grow by nearly 5.0 percent in 1988. Most of the employment opportunities this year will also be in the transportation sector. Sky Harbor International Airport is expected to continue to expand operations as are the trucking companies. Public utilities are likely to experience little change in employment levels because of the regulatory climate in Arizona.

Government employment will slow in the coming years. All sectors of government--federal, schools, state, and local--should experience slower growth in 1988 in an effort to balance budgets. Because of the budgetary cuts, some services offered by government may have to be reduced, resulting in lower employment. Government employment should increase by a moderate rate of 2.8 percent in 1988 to support population growth.

Jalal Ahmad

The Arizona Labor Force in January

Arizona's unemployment rate for January fell moderately from 6.0 percent to 5.7 percent. Preliminary figures suggest that our labor force growth remains low as surrounding states experience superior job growth. Stronger than expected agricultural activity combined with a less than usual dropoff following the Christmas holidays to push Arizona's unemployment rate below the national average. Unemployment fell to 4.8 percent in Maricopa and Pima counties.

The economy continues to grow moderately, with seasonal influences playing a major role. Wage and salary employment declined by 19,000 in January due in large part to the expected loss of 11,700 employees in the school sector as institutions closed for Christmas break. As well, there was a seasonal loss of 4,000 jobs in retail trade following the end of the Christmas buying season. Particularly in the retail trade sector, those declines were somewhat less than usual reflecting the cautious hiring practices that many companies followed in October and November.

After encouraging growth in November and December, the manufacturing industry lost those gains in January and fell back to October's level. The loss of 700 jobs brings employment down to 187,900 as most areas experienced declines. In the high technology sectors, aerospace lost 100 workers while the machinery group captured an equal number. Reports nationally portray an industry that is beginning to recover, and that had been the case earlier in Arizona. While January's losses are a setback, they may only be temporary.

Falling interest rates have not yet had a significant effect on construction. Employment fell by 2,000 as nearly every county in the state recorded losses. The slide is expected to continue through most of 1988 as a combination of high vacancy rates and a relatively sluggish economy keeps growth down.

Mirroring the cyclical nature of construction, the finance, insurance, and real estate (FIRE) industry suffered the loss of 100 this month. After reaching peak employment levels last June of 95,600, the trend has been downward. The industry has recently experienced exceptional growth as deregulation of the banking industry combined with a strong construction market to push employment in FIRE to higher levels. Now the industry is entering a correction phase where employment growth will be more restrained.

As mentioned earlier, retail trade lost 4,000 jobs as department stores and other retail establishments reduced employment following the Christmas season. This expected cutback was actually somewhat less than usual. After many months of strong growth in 1986 and 1987, retailers took a cautious approach to hiring this Christmas. Inventories were monitored closely and staffs were expanded just enough to match expected traffic loads. Since employers followed a relatively restrained path in hiring employees before the Christmas season began, significant reductions were not necessary after the season ended.

In services, there were two diverging trends. On the positive side, seasonal hirings at local resorts combined with increased tax preparation work to boost employment by 500. But moderating that was the loss of 1,300 jobs in business services as temporary help agencies suffered losses. This is the first significant decline in many months for business services and should be watched closely.

Arizona's labor market remained sluggish in January. While the unemployment rate fell, little else confirms a stronger economy. Weakness in manufacturing and continuing erosion in construction are the state's two greatest areas of vulnerability. The rest of the economy was influenced by seasonal factors that will have a positive influence until April or May. The outlook for 1988 is that it will appear very much like 1987. While there is no recession in the offing, Arizona can expect restrained growth in the months ahead.

Dan Anderson

Arizona Labor Force and Employment

January 1988 (in thousands)

	ARIZONA					MARICOPA COUNTY					PIMA COUNTY				
	Jan.* 1988	Dec. 1987	Jan. 1987	-- Amt Change -- Dec. to Jan.	1987 to 1988	Jan.* 1988	Dec. 1987	Jan. 1987	-- Amt Change -- Dec. to Jan.	1987 to 1988	Jan.* 1988	Dec. 1987	Jan. 1987	-- Amt Change -- Dec. to Jan.	1987 to 1988
TOTAL CIVILIAN LABOR FORCE**	1644.3	1652.4	1591.9	-8.1	+52.4	1016.2	1020.7	985.8	-4.5	+30.4	314.8	315.4	303.1	-0.6	+11.7
Total Unemployment	95.2	95.2	108.5	+0.0	-13.3	50.1	50.0	56.8	+0.1	-6.7	15.4	15.2	17.6	+0.2	-2.2
Rate	5.8	5.8	6.8	---	---	4.9	4.9	5.8	---	---	4.9	4.8	5.8	---	---
Rate (Sea. Adj.)***	5.7	6.0	6.7	---	---	4.8	5.1	5.7	---	---	4.8	4.9	5.8	---	---
Total Employment	1549.1	1557.2	1483.4	-8.1	+65.7	966.1	970.7	929.0	-4.6	+37.1	299.4	300.2	285.5	-0.8	+13.9

The Above Labor Force Statistics Should Not Be Used for Economic Assistance Programs

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	1404.1	1423.1	1353.4	-19.0	+50.7	923.2	936.1	894.5	-12.9	+28.7	248.7	251.8	238.5	-3.1	+10.2
Manufacturing	187.9	188.6	186.5	-0.7	+1.4	136.6	137.3	134.7	-0.7	+1.9	31.0	31.0	30.6	+0.0	+0.4
Durable Goods	145.9	146.6	145.4	-0.7	+0.5	107.1	107.6	106.2	-0.5	+0.9	25.4	25.5	25.4	-0.1	+0.0
Stone, Clay and Glass	7.4	7.6	8.4	-0.2	-1.0	4.8	4.9	5.7	-0.1	-0.9					
Primary and Fabricated Metals	15.8	15.9	16.0	-0.1	-0.2	10.8	10.8	10.7	+0.0	+0.1					
Primary Metals	7.2	7.2	7.4	+0.0	-0.2										
Fabricated Metals	8.6	8.7	8.6	-0.1	+0.0										
Machinery	65.4	65.3	64.3	+0.1	+1.1	52.0	51.9	51.3	+0.1	+0.7					
Other Durable Goods	57.3	57.8	56.7	-0.5	+0.6	39.5	40.0	38.5	-0.5	+1.0					
Aircraft and Missiles	26.8	26.9	27.8	-0.1	-1.0										
Lumber and Wood Products (Except Furniture)	8.5	8.5	8.4	+0.0	+0.1										
All Other Durable Goods	22.0	22.4	20.5	-0.4	+1.5										
Nondurable Goods	42.0	42.0	41.1	+0.0	+0.9	29.5	29.7	28.5	-0.2	+1.0	5.6	5.5	5.2	+0.1	+0.4
Food and Kindred Products	9.1	9.0	9.0	+0.1	+0.1	6.1	6.1	6.1	+0.0	+0.0					
Apparel	4.9	4.8	5.0	+0.1	-0.1	3.5	3.5	3.3	+0.0	+0.2					
Printing and Publishing	16.1	16.2	16.0	-0.1	+0.1	11.4	11.5	11.4	-0.1	+0.0					
All Other Nondurable Goods	11.9	12.0	11.1	-0.1	+0.8	8.5	8.6	7.7	-0.1	+0.8					
Mining and Quarrying	11.7	11.7	11.1	+0.0	+0.6	0.6	0.6	0.6	+0.0	+0.0	1.6	1.6	1.6	+0.0	+0.0
Copper Mining	8.7	8.7	8.2	+0.0	+0.5										
Other Mining and Quarrying	3.0	3.0	2.9	+0.0	+0.1										
Construction	95.9	97.9	102.5	-2.0	-6.6	64.0	65.4	70.7	-1.4	-6.7	18.9	19.2	19.2	-0.3	-0.3
Trans., Communications, and Public Utilities	73.9	75.0	68.5	-1.1	+5.4	50.5	51.4	46.4	-0.9	+4.1	9.8	9.8	9.2	+0.0	+0.6
Transportation	37.4	38.3	33.0	-0.9	+4.4	26.7	27.5	23.4	-0.8	+3.3	4.9	4.9	4.6	+0.0	+0.3
Communications and Public Utilities	36.5	36.7	35.5	-0.2	+1.0	23.8	23.9	23.0	-0.1	+0.8	4.9	4.9	4.6	+0.0	+0.3
Trade	347.8	351.2	335.3	-3.4	+12.5	234.1	236.9	229.2	-2.8	+4.9	57.4	58.1	54.3	-0.7	+3.1
Wholesale Trade	70.5	69.9	66.3	+0.6	+4.2	54.8	54.4	52.4	+0.4	+2.4	8.1	8.1	7.5	+0.0	+0.6
Retail Trade	277.3	281.3	269.0	-4.0	+8.3	179.3	182.5	176.8	-3.2	+2.5	49.3	50.0	46.8	-0.7	+2.5
General Merchandise and Apparel	45.3	48.9	43.3	-3.6	+2.0	29.2	31.7	28.1	-2.5	+1.1	8.0	8.7	7.4	-0.7	+0.6
Food Stores	45.6	45.7	43.4	-0.1	+2.2	29.0	29.5	28.3	-0.5	+0.7	7.7	7.5	7.1	+0.2	+0.6
Automotive and Service Stations	32.6	32.3	31.1	+0.3	+1.5	20.0	19.8	19.2	+0.2	+0.8	5.5	5.5	5.3	+0.0	+0.2
Eating and Drinking Places	97.5	97.4	94.8	+0.1	+2.7	62.5	62.5	61.6	+0.0	+0.9	18.2	18.1	17.6	+0.1	+0.6
Other Retail Trade	56.3	57.0	56.4	-0.7	-0.1	38.6	39.0	39.6	-0.4	-1.0	9.9	10.2	9.4	-0.3	+0.5
Finance, Insurance, and Real Estate	95.0	95.1	91.8	-0.1	+3.2	75.4	75.3	72.6	+0.1	+2.8	12.5	12.6	12.6	-0.1	-0.1
Services and Miscellaneous	353.5	353.0	330.6	+0.5	+22.9	237.5	237.6	222.8	-0.1	+14.7	67.1	66.7	62.5	+0.4	+4.6
Hotels and Other Lodging Places	38.4	37.8	35.0	+0.6	+3.4	22.4	21.4	20.8	+1.0	+1.6	7.0	7.1	6.2	-0.1	+0.8
Business Services	75.9	77.2	70.7	-1.3	+5.2	60.7	61.9	55.9	-1.2	+4.8	10.9	11.0	10.8	-0.1	+0.1
Health Services	88.9	88.7	82.8	+0.2	+6.1	58.3	58.3	54.2	+0.0	+4.1	18.9	18.9	17.5	+0.0	+1.4
Other Services	150.3	149.3	142.1	+1.0	+8.2	96.1	96.0	91.9	+0.1	+4.2	30.3	29.7	28.0	+0.6	+2.3
Government	238.4	250.6	227.1	-12.2	+11.3	124.5	131.6	117.5	-7.1	+7.0	50.4	52.8	48.5	-2.4	+1.9
Federal	42.8	43.3	41.2	-0.5	+1.6										
State and Local	195.6	207.3	185.9	-11.7	+9.7										
School	112.5	124.2	106.0	-11.7	+6.5										

* Preliminary
** Labor force, unemployment, and employment are reported by place of residence.
*** Normal seasonal variations have been eliminated to reflect underlying economic trends.
NOTE Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

--Prepared by Arizona Department of Economic Security, Research Administration. (CPS, 1/88)

Arizona Labor Force and Employment

Nonmetropolitan Counties
Labor Force and Employment
January 1988

	Apache	Cochise	Coconino	Gila	Graham	Green-lee	La Paz
TOTAL CIVILIAN LABOR FORCE*.	15,000	35,525	40,725	12,550	7,875	3,025	5,100
Total Unemployment	2,400	3,025	3,950	1,700	825	325	450
Rate	16.0%	8.5%	9.7%	13.5%	10.5%	10.7%	8.8%
Rate (Seas. Adj.)**. . . .	15.6%	8.0%	8.6%	12.9%	10.3%	11.3%	10.6%
Total Employment	12,600	32,500	36,775	10,850	7,050	2,700	4,650
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS							
TOTAL WAGE AND SALARY. . . .	15,275	25,200	36,375	10,275	4,925	2,875	3,300
Manufacturing.	925	1,200	2,825	1,225	200	50	225
Mining and Quarrying	25	100	150	1,325	0	1,600	50
Construction	975	1,150	1,525	625	200	225	150
Trans., Comm., & Pub. Util..	2,100	1,550	2,275	425	150	50	75
Trade.	1,525	5,550	8,675	2,200	1,325	225	1,075
Fin., Insur., & Real Estate.	325	675	825	275	125	25	100
Services and Miscellaneous .	4,425	4,475	9,250	1,625	850	125	825
Government	4,975	10,500	10,850	2,575	2,075	575	800

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
TOTAL CIVILIAN LABOR FORCE*.	31,200	26,600	38,450	10,100	35,825	51,450
Total Unemployment	2,350	3,450	3,425	825	2,375	4,650
Rate	7.5%	13.0%	8.9%	8.2%	6.6%	9.0%
Rate (Seas. Adj.)**. . . .	7.1%	11.8%	9.0%	9.1%	6.1%	10.9%
Total Employment	28,850	23,150	35,025	9,275	33,450	46,800
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS						
TOTAL WAGE AND SALARY. . . .	21,575	20,150	30,650	9,875	23,650	27,825
Manufacturing.	2,925	1,825	3,600	1,225	2,475	1,575
Mining and Quarrying	325	1,225	3,825	0	700	125
Construction	1,625	1,025	1,650	300	2,000	1,525
Trans., Comm., & Pub. Util..	1,225	1,775	1,125	625	850	1,325
Trade.	6,100	3,975	5,650	4,375	6,350	9,175
Fin., Insur., & Real Estate.	1,050	400	850	425	1,075	1,000
Services and Miscellaneous .	4,650	4,925	4,600	1,425	5,200	6,500
Government	3,675	5,000	9,350	1,500	5,000	6,600

*Adjusted to the Current Population Survey (CPS) to reflect place of residence.
**Seasonal adjustment not applicable for economic assistance programs.

NOTE--Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs January 1988

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,640,562	1,549,077	91,485	5.6%
Apache	14,899	12,596	2,303	15.5
Cochise	35,405	32,507	2,898	8.2
Coconino	40,570	36,785	3,785	9.3
Gila	12,495	10,850	1,645	13.2
Graham	7,827	7,041	786	10.0
Greenlee	3,018	2,698	320	10.6
La Paz	5,075	4,647	428	8.4
Maricopa	1,014,206	966,086	48,120	4.7
Mohave	31,103	28,839	2,264	7.3
Navajo	26,453	23,147	3,306	12.5
Pima	314,156	299,354	14,802	4.7
Pinal	38,308	35,017	3,291	8.6
Santa Cruz	10,067	9,279	788	7.8
Yavapai	35,717	33,442	2,275	6.4
Yuma	51,262	46,789	4,473	8.7

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators. Note: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

Arizona Unemployment Insurance Activities December 1987

	December 1987	November 1987	December 1986	% Change From One Year Ago
Claimants Served*	27,727	24,139	32,261	-14.1%
Average Weeks Unemployed**	8.9	INA	9.0	-.3%
Benefits Paid*	$ 11,369,737	$ 8,687,143	$ 12,695,846	-10.4%
Trust Fund Balance	$414,359,593	$423,131,996	$382,822,982	8.2%

*All Programs **UI Only

INA = Information not available

Estimated Hours and Earnings of Production Workers in Selected Industries Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	JAN.* 1988	DEC. 1987	JAN. 1987	JAN.* 1988	DEC. 1987	JAN. 1987	JAN.* 1988	DEC. 1987	JAN. 1987
FOR THE STATE OF ARIZONA									
Manufacturing	400.54	408.12	400.25	40.5	41.1	40.8	9.89	9.93	9.81
Aircraft & Missiles	INA	568.71	503.88	INA	44.5	40.8	INA	12.78	12.35
Food & Kindred Products	352.02	366.16	402.78	39.2	39.8	42.0	8.98	9.20	9.59
Primary Metals	440.14	444.22	471.42	37.3	38.0	38.8	11.80	11.69	12.15
Machinery	386.56	414.93	377.06	40.1	40.6	39.9	9.64	10.22	9.45
Copper Mining	511.29	504.71	484.76	41.3	41.1	39.8	12.38	12.28	12.18
Construction	425.98	429.09	426.24	36.1	36.8	36.0	11.80	11.66	11.84
Utilities	613.60	619.07	618.02	41.6	42.2	43.4	14.75	14.67	14.24
Retail Trade**	247.10	244.78	234.26	32.3	32.9	31.7	7.65	7.44	7.39
Wholesale Trade	394.21	390.85	382.85	38.8	39.6	40.3	10.16	9.87	9.50

Estimated Hours and Earnings of Production Workers in Selected Industries Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	JAN.* 1988	DEC. 1987	JAN. 1987	JAN.* 1988	DEC. 1987	JAN. 1987	JAN.* 1988	DEC. 1987	JAN. 1987
FOR MARICOPA COUNTY									
Manufacturing	434.70	443.52	433.24	41.4	42.0	41.3	10.50	10.56	10.49
Construction	436.57	445.38	430.08	36.2	36.9	35.9	12.06	12.07	11.98
Retail Trade**	265.35	274.46	259.03	32.8	33.8	32.5	8.09	8.12	7.97
Wholesale Trade	397.17	405.82	383.90	38.9	39.4	39.7	10.21	10.30	9.67

Estimated Hours and Earnings of Production Workers in Selected Industries Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	JAN.* 1988	DEC. 1987	JAN. 1987	JAN.* 1988	DEC. 1987	JAN. 1987	JAN.* 1988	DEC. 1987	JAN. 1987
*****FOR PIMA COUNTY*****									
Manufacturing	363.24	366.70	335.38	39.1	39.6	37.1	9.29	9.26	9.04
Copper Mining	539.75	540.56	462.16	42.5	42.8	39.4	12.70	12.63	11.73
Construction	379.70	376.38	376.94	36.3	36.4	37.1	10.46	10.34	10.16
Utilities	593.83	578.51	550.86	43.0	42.6	41.7	13.81	13.58	13.21

* Preliminary

** Excludes eating and drinking places.

NOTE--These estimates are based on a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month. Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

--Arizona Department of Economic Security, Research Administration. (1972 SIC, 1/87)

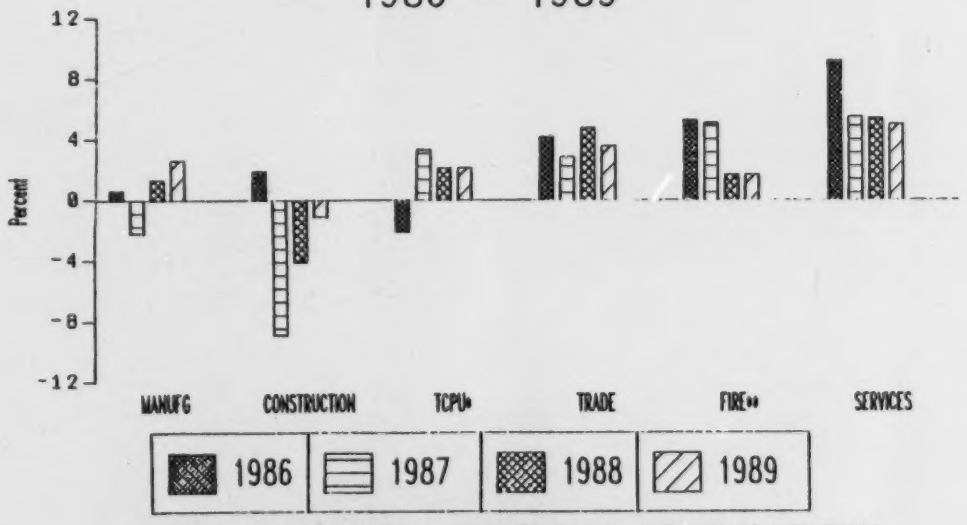
Pima County

With the slowdown in the state's economy, Pima County's wage and salary employment growth fell to 1.8 percent in 1987, down from 3.3 percent in 1986. The slower growth in the Tucson metropolitan area was caused by declines in the goods-producing industries (manufacturing, mining, and construction). According to the benchmarked employment statistics, the service-producing industries (transportation, communications, and public utilities (TCPU); trade; finance, insurance, and real estate (FIRE); and services) grew at a 4.2 percent pace, offsetting the decline in the goods-producing sectors. A similar pattern is expected to emerge in 1988 and 1989 with the population-serving industries outpacing the goods-producing sectors. Pima County total wage and salary employment growth is projected to be slightly stronger over the next two years with gains of 2.8 percent in both 1988 and 1989.

During 1987, the unemployment rate dropped as a result of slow labor force growth and the strong drop in the number of unemployed workers. The drop in the number of unemployed can be attributed to two factors. First, slow job growth and the increased difficulty in finding employment cause workers to become discouraged and stop looking for a job. Such workers are no longer counted among the unemployed. Second, employment in the construction industry dropped by nearly 9.0 percent, a loss of 1,900 jobs, in 1987. Since construction workers, in general, are more mobile than most workers, many left the county for neighboring states with more opportunities. As a result, they were not counted among the unemployed. Despite the drop in 1987, the unemployment rate is expected to climb in the next couple of years as job growth remains slow. The rate is forecast to rise to 5.8 percent in 1988 and 6.0 percent in 1989. Labor force growth is anticipated to increase by 3.8 percent in 1988 and 3.2 percent in 1989, compared to only 1.2 percent in 1987.

Manufacturing employment dropped by 600 (1.9 percent) in 1987, the first decline since the 1975-1976 recession. Durable goods manufacturing declined by 3.8 percent over the year because of drop-offs in both the machinery and aircraft and missiles

PIMA EMPLOYMENT GROWTH RATES IN SELECTED INDUSTRIES
1986 - 1989



* TCPU = TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES
** FIRE = FINANCE, INSURANCE, AND REAL ESTATE

PIMA COUNTY ECONOMIC FORECASTS
(Annual Averages, In Thousands)

	1987	Growth Rate	1988	Growth Rate	1989	Growth Rate
Labor Force	306.6	1.2%	318.2	3.8%	328.3	3.2%
Unemployed	15.5	-10.4	18.6	20.0	19.7	5.9
Unemployment Rate	5.1%	----	5.8%	----	6.0%	----
Total Employment	291.1	1.9	299.6	2.9	308.6	3.0
Total Wage and Salary Employment	243.8	1.8	250.7	2.8	257.7	2.8
Manufacturing	31.0	-1.9	31.4	1.3	32.2	2.6
Mining	1.6	-5.9	1.7	6.3	1.7	0.0
Construction	19.5	-8.9	18.7	-4.1	18.5	-1.1
TCPU*	9.5	3.3	9.7	2.1	9.9	2.1
Trade	55.2	2.8	57.8	4.7	59.8	3.5
FIRE**	12.7	5.0	12.9	1.6	13.1	1.6
Services	64.6	5.4	68.0	5.3	71.3	4.9
Government	49.6	2.3	50.5	1.8	51.2	1.4

* TCPU = Transportation, Communications, and Public Utilities.
** FIRE = Finance, Insurance, and Real Estate.

NOTE: Totals may not add due to rounding.

industries. The declines in the defense-related aircraft and missiles sector were anticipated due to the tightening of the federal budget and the completion of some larger defense contracts. Machinery manufacturing employment dropped 700 jobs (6.3 percent) last year. This sector, which is primarily high-tech companies, was expected to grow during 1987 as the drop in the value of the dollar on foreign exchange markets made U.S. goods more attractive. National statistics show that demand for American goods and consequently U.S. industrial production grew over the year. Arizona manufacturers, however, did not see these benefits. It is believed that the machinery industry will feel the effect of the drop in the dollar early in 1988. Given the anticipated declines in defense-related manufacturing and gains in high-tech manufacturing, durable goods manufacturing employment is expected to grow by 0.8 percent in 1988 and by 1.9 percent in 1989.

In 1987, nondurable goods manufacturing grew by 5.8 percent led by the printing and publishing industry, up 7.0 percent. The outlook for nondurables in the future calls for slower but strong growth with gains of 3.6 percent in 1988 and 3.5 percent in 1989. Overall, total manufacturing employment is expected to grow by 1.3 percent in 1988 and 2.6 percent in 1989.

Construction activity saw sharp declines in Pima County during 1987, following the trend in Maricopa County. Large drops occurred in general contracting, down 15.7 percent, and special trades, down 7.3 percent. Heavy construction, however, grew moderately, increasing 4.0 percent, due in part to construction of the Central Arizona Project canal. The outlook for 1988 shows construction declining as many of the factors which led to the decline last year are still in place. Vacancy rates for multi-family dwellings, office buildings, and other commercial real estate remain very high. Therefore, no recovery is foreseen in these areas until late in 1988, after much of the vacant space is absorbed. While long-term interest rates have edged downward, the declines are not large enough to

have an appreciable effect on single-family construction. The outlook for 1988 sees construction employment dropping another 4.1 percent, followed by a 1.1 percent drop in 1989.

Mining, like the other goods-producing industries in Pima County, saw employment declines as 100 jobs were lost (5.9 percent). This trend was contrary to the state trend where mining employment grew 3.6 percent in response to favorable market conditions. Pima County is expected to follow the state trend and increase mining employment 6.3 percent in 1988 and maintain its level in 1989.

In 1987, the population-serving industries grew at a combined rate of 4.2 percent. These industries will also be the strength behind the economy in the near future, growing 4.5 percent in 1988 and 3.8 percent in 1989. They will account for 12,100 new jobs over the next two years, or 87 percent of all new jobs. TCPU and FIRE will show modest growth over the forecast period, while trade and services will show stronger growth. Trade is projected to add 2,600 jobs (4.7 percent) in 1988 followed by 2,000 (3.5 percent) in 1989. The forecast for services shows an increase of 3,400 new job opportunities in 1988 and 3,300 in 1989. The service sector that will show the healthiest growth in the near term is the hotel and lodging industry. With the completion of several first-class hotels and resorts over the last three years and the increasing popularity of the Tucson area for business travelers and vacationers, tourism has emerged as a major contributor in the county's economy.

The drop-off in FIRE employment growth, 1.6 percent in 1988 compared to 5 percent in 1987, will be the result of slowdowns in both the financial and real estate industries. The principal factor in the decline of the real estate industry is the downturn in construction activity, which began in mid-year 1986. The slowdown in employment growth in the financial sector has been brought about by the industry tightening up after the rapid expansions brought on by deregulation of the banking industry and the advent of interstate banking.

Government-sector employment grew at a 2.3 percent pace in 1987. Because of budget tightening at both the state and federal levels, government employment is forecast to grow modestly, 1.8 percent in 1988 and 1.4 percent in 1989.

Overall, the outlook for Pima County has improved. Improvements in high-tech manufacturing and mining will help push job growth to 2.8 percent over the next two years, slightly above the 1.8 percent growth recorded in 1987. The unemployment rate will increase over the forecast period as new entrants to the job market surpass the economy's ability to create new jobs. Unemployment rates are projected to be 5.8 percent in 1988 and 6.0 percent in 1989.

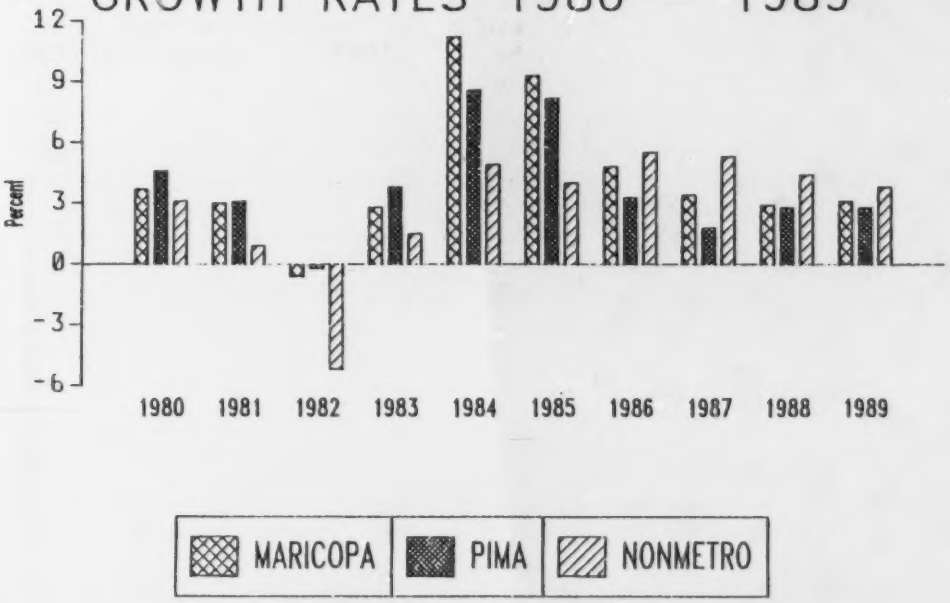
Rosemary Reardon

Nonmetropolitan Counties

In 1987, for the second straight year, the nonmetropolitan counties recorded stronger job growth than the metropolitan areas. Prior to 1986, the last time the rural counties' employment growth outpaced both Maricopa and Pima counties was 1974. According to benchmarked wage and salary employment statistics, job growth in the nonmetropolitan counties advanced 5.3 percent last year (compared to 3.4 percent in Maricopa County and 1.8 percent in Pima County). A similar pattern is anticipated for this year and the following year. A 4.4 percent job growth rate is forecast for the rural counties in 1988, while rates of 2.9 percent and 2.8 percent are projected for Maricopa and Pima. Slightly slower growth, 3.8 percent, is expected for the rural counties in 1989, but this compares favorably to the employment growth of 3.1 percent in Maricopa and 2.8 percent in Pima.

The unemployment rate dropped last year to 10.9 percent as a result of strong job growth. This year, however, the unemploy-

METROPOLITAN VS. NONMETROPOLITAN WAGE AND SALARY EMPLOYMENT GROWTH RATES 1980 – 1989



ment rate will climb. With employment growth slowing in Maricopa and Pima counties, many people who would otherwise look for work in the urban areas will remain in the rural areas. The unemployment rate is projected to climb to 12.1 percent in 1988 and 12.6 percent in 1989.

From 1982 through 1986, the nonmetropolitan counties whose economic base relied more heavily on manufacturing performed better than those relying on mining. But in 1987, there was a reversal to this trend. Last year, manufacturing dropped 200 jobs (1.0 percent) while mining gained 400 new positions. This was the first increase in rural county mining employment since 1981. Gains in mining were spurred on by favorable conditions in the world market with copper prices rising above $1.00 and short-term demand exceeding supply. The increase of 500 is even more remarkable in light of the more capital-intensive extraction processes the industry now uses. Mining employment growth is expected to continue with 500 new employees (5.4 percent) added in 1988 and 300 (3.1 percent) more added in 1989.

The decrease in manufacturing employment in the rural counties was the first drop since the 1982 recession. Contrary to the trend in the metropolitan counties, the drop in manufacturing employment came in the nondurable goods sector. The largest declines were in the apparel and food processing industries. The outlook for nonmetropolitan county manufacturing is improved over the next two years with projected employment levels up 2.0 percent in 1988 succeeded by a 4.3 percent increase in 1989. The sectors showing the strongest growth will be printing and publishing, primary metals, and machinery.

For the construction industry in the metropolitan areas, 1987 was a dismal year as over 11,000 jobs were lost. The nonmetropolitan counties avoided a decline in 1987 as all three construction sectors showed strength. In 1988, however, general contracting, heavy construction, and special trades are anticipated to decline. Much of the decline was, and will be, due to the completion of several large construction projects in 1987 and in the near future. Employment levels are projected to drop 8.8 percent in 1988 and rebound in 1989 to show a 4.8 percent growth rate.

Employment in the nonmetropolitan county trade and services industries grew 7.8 percent in 1987, adding a total of 7,300

NONMETROPOLITAN COUNTIES ECONOMIC FORECASTS
(Annual Averages, In Thousands)

	1987	Growth Rate	1988	Growth Rate	1989	Growth Rate
Labor Force	306.3	3.6%	322.1	5.2%	336.3	4.4%
Unemployed	33.4	-10.7	38.9	16.5	42.4	9.0
Unemployment Rate	10.9%	----	12.1%	----	12.6%	----
Total Employment	272.9	5.7	283.2	3.8	293.9	3.8
Total Wage and Salary Employment	227.2	5.3	237.1	4.4	246.0	3.8
Manufacturing	20.5	-1.0	20.9	2.0	21.8	4.3
Mining	9.2	4.6	9.7	5.4	10.0	3.1
Construction	13.7	5.4	12.5	-8.8	13.1	4.8
TCPU*	13.5	6.3	14.2	5.2	14.7	3.5
Trade	53.4	8.3	57.9	8.4	60.5	4.5
FIRE**	6.9	7.8	7.3	5.8	7.6	4.1
Services	47.7	7.2	50.7	6.3	52.9	4.3
Government	62.4	3.7	64.0	2.6	65.4	2.2

* TCPU = Transportation, Communications, and Public Utilities.
** FIRE = Finance, Insurance, and Real Estate.

NOTE: Totals may not add due to rounding.

jobs. The majority of these new positions were in the tourist-related trade and hotel and lodging industries. The rural counties that benefit the most from strong growth in tourism are in the northern part of the state--Yavapai, Coconino, and Mohave. With the tourism industry remaining healthy through 1989, trade employment is forecast to increase 8.4 percent this year and 4.5 next year. Services job growth is expected to record gains of 6.3 percent and 4.3 percent in 1988 and 1989. The more moderate growth in tourism-related employment in 1989 corresponds to slower growth, in both the national and state economies, which will tend to restrict recreational travel.

In the southern portion of the state, the border counties rely heavily on trade with Mexico. It was believed that the sharp drops in the value of the peso relative to the dollar, which occurred in October 1987, would hurt the economies of these counties. Information to date indicates that the border counties have not been severely impacted by the peso's drop or the instability of the Mexican economy.

The transportation, communications, and public utilities (TCPU) sector and the finance, insurance, and real estate (FIRE) sector both will continue to show strength this year before losing momentum in 1989. TCPU employment is projected to grow by 5.2 percent in 1988 and 3.5 percent in 1989, while FIRE employment is projected to increase 5.8 percent and 4.1 percent in 1988 and 1989.

The government sector, the largest employer in the nonmetropolitan counties, added 2,200 new employees (3.7 percent) last year. Government employment will continue to grow over the next two years but at a slower rate because of budget constraints at both the state and federal levels. Job growth in the government sector is projected to be 2.6 percent in 1988 and 2.2 percent the following year.

Overall, the outlook for the nonmetropolitan counties over the next two years is positive. Nearly 19,000 new jobs will be created during 1988 and 1989.

Rosemary Reardon

LMI Publications—Hot Off the Press

The following new or recently revised publications prepared by the DES Research Administration can be ordered from the address on the back of this newsletter or by calling (602) 255-3871. One copy of each publication will be sent at no charge. Multiple copies are available at a nominal charge to help cover the cost of printing.

The 1988-1989 edition of the Annual Planning Information (API) publication (PAL-327) contains projections for 1988 and 1989 of population, labor force, persons in poverty, and persons with work disabilities. Current data on average weekly wages, veterans, offenders, and Unemployment Insurance recipients are also included.

Many of the tables are presented with breakdowns by age, sex, race, and Hispanic ethnicity. All of this information is arranged for the state as a whole and by either county or Job Training Partnership Act (JTPA) service delivery area. Some data are included for the cities of Phoenix and Tucson.

The API can be used for program planning and evaluation, resource allocation, job development, and vocational counseling. Supplements to the API concerning unskilled workers concentration and high school dropouts are available on request.

Women in Arizona: An Economic Perspective analyzes the demographic and socioeconomic characteristics of women in Arizona. The report includes information on population, educational attainment, family characteristics, labor force, occupational distribution, poverty, and income.

This report, prepared in cooperation with the Vocational Education Division of the Arizona Department of Education, provides information on the role of women in Arizona's labor force for administrators, planners, researchers, counselors, educators, policymakers, and the public who seek information in order to identify social problem areas, develop employment and training policies, and design various affirmative action programs.

New Developments

"New Developments" is featured each month as a service to employers and job seekers. It is a compilation of public announcements of the more significant new construction, grand openings, major hirings and layoffs, and other employer events that have special significance for Arizona labor markets. The announcements are paraphrased and otherwise edited from articles published in newspapers and other periodicals from throughout the state. "New Developments" is limited to space available, and no attempt is made to compile an exhaustive list of all such events that have occurred during the month.

TAX INCENTIVE - The Navajo Tribal Council has established a tax incentive for businesses on the reservation that create new jobs for tribal members. A firm will receive a five-year diminishing tax credit (1 percent the first year, 20 percent reduction of the credit each year) for each job created. This incentive applies only to the tribe's business-activity tax, which is based on a company's gross income.

EDUCATION - The National Science Foundation has ranked the University of Arizona (UofA) in Tucson number 20 in the nation in terms of money spent on scientific research and development in fiscal year 1986. UofA's expenditures in this area were $124.8 million. The top spender was Johns Hopkins University of Baltimore with $440.8 million. UofA had been ranked 22nd in the previous three years.

Construction is in progress on an $11.5 million building expansion at Arizona State University. Located on the former site of the Frankenburg house at University Drive and Forest Avenue in Tempe, the 100,000-square-foot building will house the College of Architecture and Environmental Design.

TRANSPORTATION - USAir will be constructing a $10 million addition to the top of Terminal 2 at Phoenix Sky Harbor International Airport. The airline will be adding seven boarding gates, a $350,000 frequent-flier club, new ticket counters and departure lounges, and a $250,000 outbound-baggage conveyer system. The addition is expected to be completed by November.

MANUFACTURING - Weyerhaeuser Paper Co. is building a $15 to $20 million packaging facility in Yuma. Initially employing about 25 people, the company will gradually increase employment to approximately 80 workers. Most of the employees and plant supervisors will be hired from the Yuma area. Located on a 25-acre site west of Avenue 3E and south of 24th Street, the plant will make corrugated boxes for the fresh produce market.

The National Aeronautics and Space Administration and the U.S. Department of Energy have awarded a $32 million contract to the Garrett Auxiliary Power Division in Phoenix. The five-year contract is to develop a new generation of improved ceramic parts for more-fuel-efficient gas-turbine engines.

HEALTH CARE - The Arizona Medical Clinic Ltd. is under construction in Peoria. Located at 13640 Plaza Del Rio Blvd., the $7.3 million, 71,000-square-foot facility will accommodate 40 physicians and 50 support staff members upon completion in October and provide diagnostic services including a central laboratory and X-ray facilities. The physicians will specialize in family practice, internal medicine, gastroenterology, cardiology, oncology, neurology, dermatology, and general and vascular surgery.

TOURISM - Arizona has been chosen as the 1988 "Destination of the Year" by Travel Check, a European travel-industry magazine. Throughout 1988, the magazine will feature articles about the state and encourage readers to visit Arizona. Travel Check is distributed monthly to 13,850 tour operators, travel agents, and other travel professionals in Belgium, Luxembourg, and the Netherlands.

REAL ESTATE - Design Master Homes has opened two planned golf-course communities at Country Meadows, Northern and 107th avenues in the Valley. Upon completion, the Fairways subdivision will have 426 two- and three-bedroom homes ranging in price from $64,900 to $74,900. The Greens will consist of 242 two-bedroom adult condominiums priced from $49,150 to $56,150.

RETAIL TRADE - ABCO Markets Inc. has opened three more supermarkets in the Valley. One store is at Eighth Avenue and Alma School Road in Mesa, and two Glendale stores are at 43rd Avenue and Union Hills and at 67th Avenue and Cactus Road. Each store employs about 150 people.

DEVELOPMENT - The Kingwood Parke development, a 3,300-acre community in Surprise, is under construction. Expected to be completed in the mid-1990s, it will feature a range of developed sites that will be marketed to home builders. Initial housing prices will range from $49,900 to $105,000. The community, housing as many as 47,000 people, will also feature a 400-acre park with a lake, ponds, jogging and bicycle paths, tennis courts, playing fields, an elementary school, a commercial development, and green belts that will enable residents to reach the park and commercial area without having to walk on a street.

Plans have been approved by the City of Scottsdale for a 260-acre residential and commercial project at the future intersection of Frank Lloyd Wright Boulevard and the Thompson Peak Parkway. The plans call for 2,700 multifamily, townhouse, patio, and single-family homes to be built on 200 acres. The remaining 60 acres will have a retail center, a specialty center, and commercial office space.

UNEMPLOYMENT TAX - Arizona's average unemployment tax rate has decreased to 1.36 percent for 1988 from 1.38 percent in 1987. The tax is used to fund unemployment insurance payments made to unemployed workers. The 1988 rates will range from 0.1 percent to 5.4 percent of employer payrolls, based on experience ratings, with an average payment made by an employer of $95.20 for each employee earning at least $7,000.

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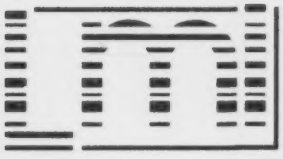

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8/10/88 S0465-1

ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XII No. 4
April 1988

Unemployment Rate

Seasonally Adjusted
February*

ARIZONA	5.7%
Maricopa Co.	4.7%
Pima Co.	4.6%
United States	5.7%

Consumer Price Index

U.S. - January 1988
Base = 1982-84

Wage Earner/Clerical Worker -	114.5
% Chg. Yr. Ago	4.1
All Urban -	115.7
% Chg. Yr. Ago	4.1

Phoenix - 4th Qtr 1987
Base = 1977

All Urban -	202.7
% Chg. Yr. Ago	4.7

Tucson - 4th Qtr 1987
Base = 1st Qtr 1983

All Urban -	121.7
% Chg. Yr. Ago	4.6

*Preliminary

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We apologize for the lateness of this issue. Please bear with us while we learn our new computer system.

Barbara Keene, Editor
Linda Van Calcar, Word Processor

Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

Are Wages Keeping Up With the Cost of Living?

Recall the year 1980. Jimmy Carter is President. Gasoline prices are around $1.20 per gallon. We are experiencing double-digit jumps in the Consumer Price Index (CPI), from 1979 through 1981, driving down the buying power of our dollars. The U. S. government has just finished a ten-year census. Copper mining is still going strong in Arizona. The Dow Jones industrial stock average is around 850. The minimum wage is $3.10 per hour. The unemployment rate is 7.1 percent nationally, and 5.9 percent in Maricopa County. Interest rates are 15 to 20 percent.

The year is 1988. Ronald Reagan is President. Gasoline prices are around $.90 per gallon. The CPI has recorded low increases over the last five years, 2 to 4 percent. We are getting ready for our next decennial census. Strong employment growth in copper mining in Arizona is a thing of the past. The Dow Jones industrial stock average ended 1987 a little under 2000. The minimum wage is $3.35 per hour. The national unemployment rate is 6.2 percent, Maricopa County's is 5.5 percent. Interest rates are around 10 percent.

Are we better off in 1988? Not necessarily. What about our standard of living? According to the results of the Small Employer Wage Survey in Maricopa County for 1980 and 1987, some people's wages are not keeping up with CPI increases. This means that these persons had less "real" wage income to spend or save in 1987 than in 1980. This also implies that their standard of living has decreased during this period.

The Consumer Price Index tells us the purchasing power of present-day dollars in relation to a certain period. The Metropolitan Phoenix CPI, published quarterly by Arizona State University, uses the same methodology as that of the U.S. CPI. It is a measure of the average change in price over time for a fixed "market basket" of goods and services. This index indicates the change in the "real" buying power of wages over a period of time. Many union contracts and governmental programs base wage and program eligibility increases on this index.

Wage surveys tell us what wages are being paid in various occupations. The Small Employer Wage Survey covers private businesses with fewer than 100 employees in the industries of construction; wholesale trade; retail trade; manufacturing; transportation, communications, and public utilities; finance, insurance, and real estate; and services. Approximately 90 percent of all companies in Maricopa County employ fewer than 100 people. This survey gathers and reports wages paid to workers in 130 comparable occupations of 1980 and 1987 in the classifications of managerial, professional, technical, service, maintenance and production, clerical, and sales. A summary occupational table aggregates all the reported wage data.

The collection of wage information from about 1,000 employers in Maricopa County has been conducted in August of each year since 1977 in nearly its present format and methodology. The surveyed occupations account for nearly 60 percent of the county's nonagricultural and nongovernmental wage and salary employment. The occupational selection, sample construction, and survey methodology are designed to provide results that are representative of the occupational and industrial structures of small businesses in Maricopa County.

Table 1

THE SUM OF HOURLY WAGES BY INDUSTRY

Industry	1980 Wages	1987 Relative Wages	1987 Actual Wages	Percentage Over (+) or Under (-)
Construction	$354.98	$ 490.58	$ 436.06	-11.1
Manufacturing	346.11	478.32	471.55	-1.4
T.C.P.U.	88.39	122.15	122.14	---
Wholesale Trade	199.85	276.19	267.10	-3.3
Retail Trade	200.59	277.22	273.64	-1.3
F.I.R.E.	148.69	205.49	221.19	+7.6
Services	268.44	370.98	396.40	+6.9
All Industries	900.03	1,243.84	1,214.52	-2.4

T.C.P.U. = Transportation, Communications, and Public Utilities.
F.I.R.E. = Finance, Insurance, and Real Estate.

Table 2

THE SUM OF HOURLY WAGES BY OCCUPATIONAL GROUP

Occupational Group	1980 Wages	1987 Relative Wages	1987 Actual Wages	Percentage Over (+) or Under (-)
Managerial	$175.35	$242.33	$248.36	+2.5
Professional	128.58	177.70	190.72	+7.3
Technical	63.87	88.27	93.33	+5.7
Service	46.53	64.30	60.15	-6.5
Maint. & Production	363.81	502.79	455.94	-9.3
Clerical	91.01	125.78	129.50	+3.0

Table 3

HOURLY WAGES
SERVICE OCCUPATIONAL GROUP

Occupational	1980 Wage	1987 Relative Wage	1987 Actual Wage	Percentage Over (+) or Under (-)
Bartender	$4.10	$5.67	$4.51	-20.5
Chef	6.27	8.67	7.49	-13.6
Cook	3.86	5.33	5.43	+1.9
Cosmetologist	4.29	5.93	8.78	+48.1
Counter Attendant	3.29	4.55	4.15	-8.8
Dining Room Attendant	2.94	4.06	3.44	-15.3
Host/Hostess	3.76	5.20	4.47	-14.0
Housekeeping Cleaner	3.25	4.49	4.78	+6.5
Kitchen Helper	3.25	4.49	3.94	-12.2
Meat Cutter	5.44	7.52	6.60	-12.2
Short Order Cook	3.84	5.31	4.01	-24.5
Waiter/Waitress	2.24	3.10	2.55	-17.7

The time period we are using for this article is 1980 to 1987. During these years, the Metropolitan Phoenix CPI increased 38.2 percent. This means that maintaining the same standard of living in 1987 would require $138.20 for each $100.00 spent in 1980. A wage increase of over 38.2 percent from 1980 to 1987 would give a wage earner enough purchasing power to raise one's standard of living in 1987. Any wage increase less than 38.2 percent for this period would provide less "real" buying power in 1987.

The accompanying tables include an occupation's 1980 average hourly wage rate, the relative hourly wage level necessary to give that occupation the same "real" income in 1987, the 1987 average hourly wage rate, and the percentage difference between the 1987 relative and actual wage rates. The occupations' wage levels are taken from the Small Employer Wage Surveys of those years. Since both the CPI and the wage rates are surveyed numbers, there may be individual deviations.

First, let us look at Maricopa County's wages by industry for these years. One hundred thirty occupations have been categorized in seven industries for 1980 and 1987. Listed in Table 1 are the totals of the 1980 and 1987 average hourly wage levels for these occupations and the percentage difference between the 1987 relative and actual wages.

Table 2 groups the 130 occupations' total average hourly wages by their overall classification. The managerial, professional, technical, and clerical categories of occupations lead in the increase of the purchasing power of wages from 1980 to 1987.

The occupational groups of maintenance and production and service, which together account for over 40 percent of Maricopa County's employment in 1987, lag behind in the increase of buying power of wage dollars from 1980 to 1987. These groups of occupations are characterized by building trade occupations, union association, food service, or minimum wage attachments. First, let us look at the food service occupational sector more closely.

On January 1, 1981, the federal minimum wage was last raised to $3.35 per hour, an 8.1 percent increase from the previous year. From 1980 to 1981, the service occupational category, primarily composed of food service occupations, increased 9.7 percent in total average wage. This group's overall wage rate increased by slightly under 20 percent in the next six years. Table 3 lists the group's occupations and 1980 and 1987 hourly wage levels. Most of these occupations have lost purchasing power of wages from 1980 to 1987.

The above wage statistics correspond with the growth of restaurant sales in Maricopa County during this seven-year period. Total restaurant sales enjoyed an increase of over 80 percent, and per capita sales increased around 45 percent. This sales growth occurred as restaurant labor costs lagged behind those in other industries.

Maricopa County's construction industry, which had strong employment growth from 1980 to 1987, has also showed changing movements in wage levels. Overall, the industry's maintenance and production occupational category consisting primarily of building trade positions,

Table 4

HOURLY WAGES
CONSTRUCTION INDUSTRY
MAINTENANCE AND PRODUCTION OCCUPATIONAL GROUP

Occupation	1980 Wage	1987 Relative Wage	1987 Actual Wage	Percentage Over (+) or Under (-)
Bricklayer	$11.66	$16.11	$14.58	-9.5
Carpenter	9.66	13.35	12.70	-4.9
Cement Mason/Finisher	10.49	14.50	12.12	-16.4
Crane Operator	14.60	20.18	14.52	-28.0
Dry Wall Applicator	10.72	14.82	10.43	-29.6
Electrician	10.05	13.89	9.79	-29.5
General Laborer	6.67	9.22	7.54	-18.2
Industrial Truck Oper.	7.29	10.07	11.94	+18.6
Maintenance Mechanic	7.72	10.67	10.20	-4.4
Oiler	10.49	14.50	13.84	-4.6
Painter	8.54	11.80	9.01	-23.6
Pipefitter (Plumber)	11.18	15.45	11.82	-23.5
Plasterer	11.59	16.02	10.10	-37.0
Roofer	9.73	13.45	9.92	-26.2
Saw Operator	6.44	8.90	10.21	+14.7
Sheet Metal Worker	10.15	14.03	12.53	-10.7
Truck Driver-Heavy	9.89	13.67	12.43	-9.1
Truck Driver-Light	6.56	9.07	9.00	-0.8
Welder	8.50	11.75	8.54	-27.3

Table 5

HOURLY WAGES
RETAIL TRADE AND SERVICES INDUSTRIES
MAINTENANCE AND PRODUCTION OCCUPATIONAL GROUP

Occupation	1980 Wage	1987 Relative Wage	1987 Actual Wage	Percentage Over (+) or Under (-)
Air Conditioning Mechanic	$ 8.18	$11.30	$ 9.29	-17.8
Auto Body Repairer	7.71	10.66	11.68	+9.6
Auto Car Wash Attendant	3.40	4.70	4.30	-8.5
Auto Mechanic	7.74	10.70	10.32	-3.6
Auto Serv. Station Attend.	4.12	5.69	4.56	-19.9
Bus Driver	3.42	4.73	7.62	+61.1
Day-Care Center Worker	3.47	4.80	4.12	-14.2
Dry Cleaner	4.33	5.98	6.71	+12.2
Groundskeeper	4.24	5.86	6.02	+2.7
Industrial Garage Worker	6.24	8.62	7.52	-12.8
Laundry Operator	3.30	4.56	4.34	-4.8
Nursing Assistant	3.53	4.88	4.75	-2.7
Presser (Laundry/Dryclean.)	4.27	5.90	5.26	-10.8
Repairman	5.92	8.18	6.36	-22.2
Sales Route Driver	6.69	9.25	5.82	-37.1
Security Aide/Guard	3.60	4.98	5.17	+3.8

lost greatly in its "real" wage income from 1980 to 1987. This group's total occupations' wage level decreased 16 percent in purchasing power during this period. These occupations in the construction industry's maintenance and production occupational classification and 1980 and 1987 hourly wage levels are in Table 4. Only two of these occupations were ahead in "real" wage gain from 1980 to 1987.

Price increases of new and used homes in Maricopa County lagged behind CPI increases during this 1980-to-1987 period. New and resale median selling prices of single-family homes in Maricopa County increased only around 25 percent from 1981 to 1987, about 13 percent below the metropolitan Phoenix CPI percentage increase. Median prices of new and used townhouse sales in the county rose minimally during this same period, 1.5 and 6.7 percent. This occurred while the total average wage level of the construction industry's maintenance and production occupational category was increasing around 15 percent.

Table 5 gives the maintenance and production occupations found primarily in the retail and services industries, 1980 and 1987 hourly wage levels, and the percentage differences between them. Only five of these occupations gained in purchasing power of wage dollars from 1980 to 1987.

The manufacturing industry's maintenance and production occupational classification fared better in "real" wage income gain than did the construction industry. Manufacturing's overall maintenance and production wage level, however, fell about 6 percent below the CPI increment from 1980 to 1987. Table 6 gives the remaining maintenance and production occupations from the All Industry aggregated wage levels, most of which are found in the manufacturing industry. About one-half of these occupations gained in the buying power of wage dollars from 1980 to 1987.

The occupational classifications of managerial, professional, technical, clerical, and sales have yet to be reported on in this article. As calculated in group totals, all these categories gained in "real" wage income from 1980 to 1987. Most of the occupations in the professional classification recorded average wage rate increases above the rise in the cost of living and, as a group, rose 48.3 percent in total average wage from 1980 to 1987--over 10 percent higher than the CPI increase for the same period. Table 7 gives the professional occupations, 1980 and 1987 hourly wage levels, and the percentage difference.

The technical group of occupations had the second-highest absolute "purchasing power" increment from 1980 to 1987. As a group, the buying power of its total average wage rate was 5.7 percent above the CPI-adjusted wage level for the period from 1980 to 1987. Table 8 gives the occupations in this category.

Most of the managerial occupations recorded gains in "real" income during this period. As a group, the total average wage increase was about 3 percent over the CPI rise. The list of managerial occupations, 1980 and 1987 hourly wage levels, and percentage differences are in Table 9.

The clerical group of occupations had a pattern in "real" wage income increase from 1980 to 1987 similar to that of the managerial category. Table 10 lists the clerical occupations. The remaining occupational group, sales, is in Table 11.

Table 6

HOURLY WAGES
MAINTENANCE AND PRODUCTION OCCUPATIONAL GROUP

Occupation	1980 Wage	1987 Relative Wage	1987 Actual Wage	Percentage Over (+) or Under (-)
Building Maint. Repairer	$ 4.58	$ 6.33	$ 6.84	+8.1
Cabinetmaker	6.38	8.82	8.66	-1.8
Compositor/Typesetter	5.57	7.70	9.18	+19.2
EDP Computer Operator	5.72	7.91	8.79	+11.1
Custodial Worker	3.75	5.18	5.92	+14.3
Drill Press Operator	5.53	7.64	7.77	+1.7
Electronics Assembler	4.28	5.91	6.16	+4.2
Industrial Truck Oper.	5.62	7.77	7.66	-1.4
Inspector	6.64	9.18	9.63	+4.9
Lathe Operator	7.26	10.03	10.66	+6.3
Machinist	7.29	10.07	10.35	+2.8
Maintenance Mechanic	8.28	11.44	9.98	-12.8
Material Handler	4.98	6.88	6.54	-4.9
Millwright	8.64	11.94	10.68	-10.6
Oiler	9.83	13.59	12.48	-8.2
Packager	4.34	6.00	5.54	-7.7
Photoengraver	6.54	9.04	10.01	+10.7
Printing Press Operator	6.90	9.54	8.90	-6.7
Product Assembler	4.63	6.40	6.42	+0.3
Production Assembler	4.91	6.79	6.44	-5.2
Saw Operator	6.46	8.93	7.64	-14.4
Tool and Die Maker	8.69	12.01	12.13	+1.0
Truck Driver-Heavy	8.05	11.13	9.48	-14.8
Truck Driver-Light	5.23	7.23	6.80	-5.9
Warehouse Worker	4.20	5.80	6.74	+16.2
Welder	6.90	9.54	8.37	-12.3

Table 7

HOURLY WAGES
PROFESSIONAL OCCUPATIONAL GROUP

Occupation	1980 Wage	1987 Relative Wage	1987 Actual Wage	Percentage Over (+) or Under (-)
Accountant	$ 8.56	$11.83	$13.21	+11.7
Architect	10.95	15.13	17.13	+13.2
Buyer	7.34	10.14	11.51	+13.5
Civil Engineer	11.45	15.82	15.93	+0.7
Claim Adjuster	8.61	11.90	13.21	+11.0
Claim Examiner	8.80	12.16	10.52	-13.5
Electronic Engineer	10.95	15.13	19.52	+29.0
Licensed Practical Nurse	5.35	7.39	7.73	+4.6
Loan Officer	6.18	8.54	11.76	+37.7
Mechanical Engineer	13.87	19.17	17.23	-10.1
Purchasing Officer	9.11	12.59	12.57	-0.2
Registered Nurse	8.46	11.69	11.00	-5.9
EDP Systems Anaylst	10.45	14.44	18.03	+24.9
Training Specialist	8.50	11.75	11.37	-3.2